

REMARKS

Claims 1-16 are pending and under consideration in the above-identified application.

In the Office Action of January 5, 205, claims 1-16 were rejected under 35 U.S.C.

§102(b) as anticipated by the disclosure of *Shultz et al.*

Applicants have amended claims 1, 4, 9 and 12 slightly for clarity. No new matter has been added.

The examiners basis for relying on Schulz et al is an interpretation of the present claims to not exclude reliance on a Huber type function, i.e., that prior art which uses a function in addition to a Huber-type function somehow meets the claims.

Contrary to the examiner's interpretation, each of the independent claims excludes the reliance upon a Huber type energy functions in the pixel value update process. This is clear in view of the respective requirements to utilize "said energy function" in the subsequent operations. Since the subsequent steps necessarily refer back to the non-Huber-Markov picture energy function, the resultant calculation does not utilize a Huber-Markov function. The advantages of the invention and this clear distinction from the prior art are made clear in the disclosure at page 18, third paragraph, and page 19, second paragraph, of the specification.

As acknowledged by the examiner, *Shultz et al.* relates to prior art Huber type energy functions. Accordingly, Schulz et al necessarily does not anticipate or fairly suggest use of non-Huber type energy functions as set forth in the present invention.

In that regard, the Huber-Markov random field (HMRF) image model used in *Shultz et al* uses a Huber-Markov function. Formula 22 is the assignment expression of forumulae 20 and 21. The $\rho_r(x)$ in formula 19 defines the Huber function. Formula 22 uses this function. Formula 22 also defines the symbol of the sum of the clique functions, so *Schulz et al* necessarily use the Huber function for its image expansion algorithms.

Moreover, the function $\Omega[z, T]$ uses the $\rho_r(x)$ Huber function. On the other hand, *Schulz et al* describe using equation (34) (see page 238, col. 1, line 6) so *Schultz et al* use Huber function. The negative gradient is also calculated from $\Omega[z, T]$.

Therefore, it is submitted that claims 1-16 are patentable and that the application is in condition for allowance. Notice to that effect is requested.

No fee is due with this response. However, the Commissioner is hereby authorized to charge any deficiency in required fee to Deposit Account No. 19-3140.

CONCLUSION

In view of the above amendments and remarks, Applicants submit that claims 1-16 are allowable and that the application is in condition for allowance. Notice to that effect is requested.

Respectfully submitted,

Dated: March 8, 2005
By: 
David R. Metzger
Registration No. 32,919
SONNENSCHEIN NATH & ROSENTHAL LLP
P.O. Box 061080
Wacker Drive Station, Sears Tower
Chicago, Illinois 60606-1080
(312) 876-8000